REMARKS

Applicants respectfully request reconsideration of the present application in view of the following reasons. Claims 18, 19 and 20 are being added. Applicants respectfully submit that newly added Claims 18, 19 and 20 do not add new matter, and do not require a new search. Claims 1-20 are now pending in this application.

I. Claim Rejections Under 35 U.S.C. § 102

On page 2 of the Office Action, Claims 1-3, 6-8 and 10-15 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,161,923 to Young (hereinafter "Young"). Applicants respectfully traverse the rejection.

A. Claims 1, 10, 12, and 13

i. Young Does Not Teach A Second Interval Immediately Following A First Interval

Independent Claim 1 recites in part:

> the second predetermined time interval immediately following the first predetermined time interval ... .

(Underlining added). Independent Claims 10, 12 and 13 include similar elements.

With respect to all of the claims, on pages 3-5 of the Office Action, the Examiner generally points to column 5, lines 1-15; column 7, lines 5-34; and FIG. 9 of Young as teaching the claim elements.

Column 5, lines 1-15 of Young state:

> ... In response to receiving the piconet beacon frequency at receiver 210, the inquiring device 208 establishes communications with the master device 202.
>
> The master device 202 broadcasts the piconet beacon frequency at a first predetermined frequency f(k~) from among the plurality of spread spectrum broadcast frequencies. Alternately, the master device 202 broadcasts the piconet beacon frequency

> at a first plurality of predetermined frequencies from among the plurality of spread spectrum broadcast frequencies. The inquiring device 208 monitors the first plurality of piconet beacon frequencies, and in response to receiving one of the piconet beacon frequencies, establishes communications with the master device 202.

Col. 7, lines 5-34 of Young state:

> FIG. 7 illustrates messages exchanged between a master device and an inquiring device operating in accordance with the present invention communication establishment system. After an inquiring device decodes the first downlink FHS packet, it can retrieve the master device's BD_addr and CLK information. **After a (2 m-1)- slot long Backoff Period** (where m is a randomly selected number between 1 to 8 for the Contention Period of 15 slots), the inquiring device sends the first uplink FHS packet in the slot on frequency $f(k_\beta + 2\ m\text{-}1)$, which is derived from the master device hopping sequence. Note, the inquiring device can only transmit in the odd numbered slots. The FHS packet from inquiring device contains the inquiring device BD_addr in the payload and uses an AC derived from master device's BD_addr. Once the master device receives FHS packet from the inquiring device, it recognizes that a device is requesting connection, and the second downlink FHS packet is sent from the master device to the inquiring device in the slot with frequency $f(k_\beta + 2\ m)$. The second downlink FHS packet from the master device uses the AC derived from inquiring device's BD_addr and carries an AM_addr assigned to the inquiring device in the payload.
>
> The inquiring device confirms the receipt of the AM_addr with an ID packet in the slot of frequency $f(k_\beta + 2\ m+1)$. After receiving the ID packet from the inquiring device, the master device sends a POLL packet. A NULL packet is expected from the inquiring device before master device proceeds to communicate with higher layer protocols. This is similar to normal Page process of Bluetooth, see the Bluetooth specification.

(Underlining and emphasis added.) Thus, in Young, a backoff period occurs between the first downlink FHS packet and the first uplink FHS packet. Moreover, the backoff period is at least two time slots long. FIG. 7 of Young also shows that the FHS of the inquiring device is

not immediately following the FHS of the master. In addition, FIG. 7 of Young teaches a backoff period between the master device FHS and the inquiring device FHS.

A backoff period introduces delay and therefore is not immediate. Hence, Young does not teach "[a] second predetermined time interval immediately following the first predetermined time interval" as recited by Claim 1. Claims 10, 12 and 13 include similar elements. Claims 1, 10, 12 and 13 are therefore patentable over Young.

An anticipatory rejection cannot be properly maintained where the reference used in the rejection does not disclose all of the recited claim elements. Claims 2-3 include the elements of Claim 1. Claims 14-15 include the elements of Claim 13. Therefore, for at least the above reasons, Applicants respectfully request withdrawal of the rejection of Claims 1-3, 10, 12-15. New Claim 18 includes the elements of Claim 10. New Claim 19 includes the elements of Claim 12.

B. Claims 2 and 14

i. Young Does Not Teach Wherein The Piconet Joining Request Includes A Request For A Role Switch

Applicants respectfully traverse the Examiner's rejection of Claims 2 and 14. Claims 2 and 14 recite: "wherein the piconet joining request includes a request for a role switch." On page 4 of the Office Action, the Examiner points to column 5, lines 1-15; column 7, lines 5-34; and FIG. 9 of Young as noted above.

Column 3, lines 32-58 of Young states:

> The present invention provides a method to avoid the lengthy inquiry procedure needed to establish a connection when a new BT device seeks to join a piconet. The connection is established with minimal disturbance to current traffic. Instead of making connections to each nearby device using a SDP query, which interrupts the piconet traffic, the present invention method permits a Bluetooth device to find the masters of all nearby piconets and to become a slave when it joins these piconets. This feature is particularly useful for applications for which a master has to be the service provider, for example the gateway

> as defined in the LAN Access Profile or Dial-up Networking Profile. For other applications, the newly joining slave device can still make SDP queries, once it has become a member of the piconets. Without the present invention mechanism, a BT device must go through Master-Slave (MS) switch during or after the establishment of a connection to seek desired services. The MS switch process is lengthy compared to the present invention, as all slaves of an existing piconet need to be properly scheduled before the master can enter the page scan state to accommodate the page request from the new device. Therefore, **it is desirable to avoid a MS switch** in such gateway applications where the master must reserve its capacity for on-going traffic. As long as it's justified by the services/applications, the new slave has the option to request a master-slave (MS) switch **after** it becomes a member of the piconet.

(Underlining and emphasis added). Thus, Young does not teach a role switch during joining. From above, Young teaches that "the new slave has the option to request a master-slave (MS) switch **after** it becomes a member of the piconet." (Col. 3, lines 56-58). "**After** it becomes a member of the piconet" implies that a role switch is not part of a piconet joining request. Hence, Young fails to teach "wherein the piconet joining request includes a request for a role switch" as recited by Claims 2 and 14. New Claims 18 and 19 include similar elements.

An anticipatory rejection cannot be properly maintained where the references used in the rejection do not disclose all of the recited claim elements. Claims 3 and 15 include elements of Claims 2 and 14, respectively. Therefore, for at least the above reasons, Applicants respectfully request withdrawal of the rejection of Claims 2-3 and 14-15. New Claims 18 and 19 include similar elements.

C. Claims 6 and 11

Applicants respectfully traverse the Examiner's rejection of Claims 6 and 11. Claim 6 recites in part:

> scanning the wireless channel from the wireless communications device for a second predetermined time interval, the second predetermined time interval immediately following the first predetermined time interval;

> receiving a request for additional information from a remote wireless communications device during the second predetermined time interval; and
>
> transmitting the additional information with a second beacon packet across the wireless channel.

(Underlining added). Claim 11 includes similar elements.

i. Young Does Not Teach Additional Information

On page 4 of the Office Action, the Examiner points to column 5, lines 1-15; column 7, lines 5-34; and FIGS. 9-11 of Young as noted above. In Young, the master sends a BD_addr and CLK:

> The master device 202 broadcasts its BD addr and CLK information on the piconet beacon frequency in a first downlink FHS packet, and the inquiring device 208 receives the BD addr and CLK information of the master device

(Col. 5, lines 16-19). Then the inquiring device responds:

> the inquiring device 208 transmits a first uplink FHS packet to the master device 202. The first uplink FHS packet to the master device 202 includes the inquiring device BD addr in the FHS packet payload. In addition, the first uplink FHS packet includes a FHS packet access code (AC) derived from the master device BD addr.

(Col. 5, lines 26-31). After the exchange of addresses and access codes, the master and slave acknowledge one another. (Col. 5, lines 38-49). Thus, Young merely discloses establishing communications with a piconet and goes no further. Hence, Young fails to teach "receiving a request for additional information from a remote wireless communications device during the second predetermined time interval" or "transmitting the additional information with a **second** beacon packet across the wireless channel" as recited by Claim 6. Claim 11 includes similar elements.

ii. Young Does Not Teach A Second Interval Immediately Following A First Interval

As discussed above in **Section A.i.**, in Young, a backoff period occurs between the first downlink FHS packet and the first uplink FHS packet. Moreover, the backoff period is at least two time slots long. FIG. 7 of Young also shows that the FHS of the inquiring device is not immediately following the FHS of the master. In addition, FIG. 7 of Young teaches a backoff period between the master device FHS and the inquiring device FHS.

A backoff period introduces delay and therefore is not immediate. Hence, Young does not teach "[a] second predetermined time interval immediately following the first predetermined time interval" as recited by Claim 6. Claims 11 includes similar elements.

An anticipatory rejection cannot be properly maintained where the reference used in the rejection does not disclose all of the recited claim elements. Therefore, for at least the above reasons, Applicants respectfully request withdrawal of the rejection of Claims 6 and 11. Claims 7-8 and new Claim 20 include the elements of Claim 6. Therefore, Applicants respectfully request withdrawal of the rejection of claims 6-8, and 11.

II. Claim Rejections Under 35 U.S.C. § 103

On page 5 of the Office Action, Claims 4-5, 9 and 16-17 were rejected under 35 U.S.C. § 103(a) as being anticipated by Young in view of U.S. Patent Application Publication No. 2004/0170217 to Ho (hereinafter "Ho"). Applicants respectfully traverse the rejection.

Ho teaches various frequency hopping and rotation sequences related to piconets. However, Ho fails to teach "[a] second predetermined time interval immediately following the first predetermined time interval" as recited by Claim 1. Claim 13 includes similar elements. Ho fails to teach "receiving a request for additional information from a remote wireless communications device during the second predetermined time interval" or "transmitting the additional information with a **second** beacon packet across the wireless channel" as recited by Claim 6.

As discussed above, Young fails to teach "[a] second predetermined time interval immediately following the first predetermined time interval" as recited by Claim 1. Claim 13 includes similar elements. Young fails to teach "receiving a request for additional

information from a remote wireless communications device during the second predetermined time interval" or "transmitting the additional information with a **second** beacon packet across the wireless channel" as recited by Claim 6. Therefore, Young and Ho, alone or in combination, fail to disclose, teach, or suggest at least one element recited in each of independent Claims 1, 6, and 13.

An obviousness rejection cannot be properly maintained where the references used in the rejection do not disclose all of the recited claim elements. Therefore, for at least the above reasons, Applicants respectfully request withdrawal of the rejection of Claims 4-5 which include the elements of Claim 1; Claim 9 which includes the elements of Claim 6; and Claims 16-17 which include the elements of Claim 13.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C. F. R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C. F. R. §1.136 and authorize payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date September 8, 2009 By _____

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